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ABSTRACT

Emerging issues and recent literature associated with language and curriculum development for exceptional bilingual students are discussed. Studies are cited which document student gains in achievement as a result of native language, English-as-a-second-language, or bilingual education strategies with handicapped limited-English-proficient (LEP) students. Issues explored include language choice, cultural relevance in curriculum, student involvement in the learning process, internal perceptions of control, and teacher-pupil interactions. Topics related to instructional models and teaching strategies are introduced, including second language acquisition, instrumental enrichment, educational implications of hemispheric research, and materials and media. Four service delivery models, including a bilingual special education model, are outlined. Finally, categories of instructional personnel who should be targeted for special training in bilingual special education are listed. Among conclusions cited is the need for a networking of agency efforts to meet the needs of LEP handicapped students. (JW)

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CHAPTER 4

LANGUAGE AND CURRICULUM DEVELOPMENT FOR EXCEPTIONAL BILINGUAL CHILDREN

Alba A. Ortiz

In 1979, Chinn conducted extensive literature searches in an effort to identify specialized curricula for handicapped culturally different children. These searches yielded publications which addressed strategies and approaches appropriate to minorities, but none were specific to exceptional children. Five years later, Chinn's work remains state of the art: (a) There are few, if any, curricula designed for exceptional culturally diverse students; (b) few instructional strategies have universal appeal and utilitarian value; (c) frequently, it is individual teachers who develop curricula and instructional strategies for use with these students; and (d) there has been little dissemination of available curricula, materials, and instructional strategies for this population.

The lack of information related to handicapped minorities is even more dramatic when one considers educational programming for exceptional language-minority students. Special education literature rarely discusses unique considerations in working with limited-English-proficient (LEP) or bilingual students.

It is the purpose of this article to highlight emerging issues and concerns associated with language and curriculum development for exceptional bilingual students and to review literature which holds promise in developing practice and policy for service delivery to these students.

BILINGUAL INSTRUCTION FOR THE HANDICAPPED

A common misconception is that handicapped children who have limited English proficiency, or who are bilingual, should be taught in English. Educators reason that if exceptional children have difficulty developing language skills, they will require more time than others to master a language and will be confused by bilingual instruction. It is thought to be in the best interest of students to provide instruction in one language and the choice is usually English (Ortiz, 1984). Cummins

(1982), however, suggests that bilingual instruction is more effective than English-only instruction in promoting English academic skills and that native language skills can be developed without negative repercussions for the learning of English. As a matter of fact, the greater the child's proficiency in his or her native language, the greater likelihood of success in learning English as a second language.

Baca (1980) provides an historical overview of litigation and legislation related to the education of LEP children and establishes a strong case for bilingual education as a sound instructional method. Studies cited indicated that bilinguals are better able to deal with abstract aspects of language, have greater cognitive flexibility, and may have greater linguistic sensitivity. Rather than being cognitively or academically impaired, children learning two languages may have skills superior to those of monolinguals (Albert & Obler, 1978).

While there are many questions regarding bilingual development to be resolved by future research, a growing body of literature suggests that bilingual proficiency is not beyond the capability of handicapped children and that a policy of single-language instruction may ignore linguistic skills which are important to the child and to his or her community (Greenlee, 1981). Several studies document student improvement or gains in achievement as a result of native language, English as a second language, or bilingual education strategies with handicapped LEP students:

1. Askins (1978) found that students involved in the Responsive Environment Early Education Program (REEEP) made significant gains in language development both in English and Spanish and in school readiness. Sixty percent of the students scored better than estimated/expected on a test of English; 40% scored better than estimated/expected on a test of Spanish.

2. In a study of intellectually and physically handicapped children, Sanua (1976) found that 78% of the subjects showed progress in reading and 74% showed gains in self-concept when instruction was conducted bilingually.

3. Baca (1974) found that informal and structured bilingual interventions resulted in improvement of attitudes and achievement among 15 mildly handicapped students.

4. Weiss (1980) documented dramatic language-related learning improvement among 3- to 5-year-old handicapped children participating in the INreal REactive Language (INREAL) program. Longitudinal data showed that students who had participated in the project had less need for follow-up remedial services and fewer grade retentions.

5. McConnell (1981) describes the use of Individualized Bilingual Instruction (IBI) for teaching academic areas and oral language in English and in Spanish. Gains for both high- and low-ability children were educationally and statistically significant.

6. Observations, interviews with participating teachers, and data from a survey questionnaire (Muller, 1975) indicated that, through bilingual approach, bilingual mentally retarded students were able to improve communication and study skills and were able to develop better teacher/student rapport.

7. Bruck (1978), who studied the suitability of early French immersion programs for the learning disabled child, found that children with language problems in French immersion programs continued to develop facility in their first language, learned basic skills at the predicted rate, and exhibited no severe behavioral problems.

The instructional process for language-minority students who have learning difficulties should be consistent with what we know about how language is acquired and about the interrelationships between first and second language acquisition. For minority students who are academically at risk, strong promotion of native language conceptual skills will be more effective in providing a basis for the acquisition of literacy in English (Cummins, 1983).

Language Choice

Secada (in press) offers a framework for choosing language interventions for hearing-impaired Hispanics which includes the major options available for limited-English-proficient students (use of English or the native language only; use of two languages, the native language and ESL; exclusive use of the native language) and the major program options for the hearing impaired (exclusive use of oral English; a mixture of oral and manual communication; exclusive use of the manual mode). By increasing program options, students might, for example, receive content instruction in the native language, English as a second language training to enhance transfer of oral skills from the native language to English, and as training in total communication to facilitate mainstreaming. Secada cautions that programs that develop English oral or manual sign skills to the exclusion of students' home language risk confusing and alienating them from their community.

Adequate instruments and models have yet to be developed to capture the complex relationship between first and second language acquisition or to describe the relationship between variables such as attitudes and motivations of second language learners to attained language proficiency (Johnson & Krug, 1980). The task of sorting out these relationships becomes even more complex with the addition of a handicapping condition. Nonetheless, careful consideration must be given to factors which might influence the child's performance and affect language choice, including (a) parent choice or preference; (b) student choice or preference; (c) student age; (d) length of time in this country; (e) type and severity of handicapping condition; (f) language aptitude; (g) general intellectual abilities; (h) motivation; (i) attitudes toward speakers of English and toward instruction in English or the other language; (j) time allocated to language teaching and to instructional tasks; (k) performance or progress as a result of instruction in a given language; and (l) availability of bilingual personnel, and so forth. Because of the

multiplicity of variables which must be considered in choosing the language of instruction, a significant contribution to the field would be the development of a framework for weighing these variables in educational/instructional decision-making.

Cultural Relevance in Curriculum

Perhaps the most common theme in the literature is that poor achievement can be attributed to content, materials, and strategies which are not culturally relevant (Almanza & Mosley, 1980; Chinn, 1979a; Diggs, 1974; Jaramillo, 1974; Ortiz, 1981; Plata, 1979; Rodriguez, Cole, Stile, & Gallegos, 1979). While there is general agreement that adapting curricula and materials to make them culturally relevant is a step toward reducing the discrepancy between the characteristics of the student and those of school programs, there is disagreement about the nature of cultural differences which must be considered, their distribution within given groups, and specifically <u>how</u> instruction should be adapted to take these factors into account (Henderson, 1980). Benson (as cited in Benson, Medrich, & Buckley, 1980) summarizes this dilemma:

> Each year children attend school, they bring with them a lot of "baggage": their health, energy levels, knowledge of skills acquired in formal learning and in informal activities, tastes, attitudes, and expectations. Presumably, some of this baggage is helpful to a given child in his school work, and some is not helpful. We know very little about how the baggage is acquired by a child, or in some cases, forced on him. What we do know is that the differences in school performance of children is greater than can be explained by initial intellectual endowments and that the gap in performance tends to get wider the longer children attend school....So public policy, as it has shaped up, seeks to compensate for deficiencies in home background but this compensation is offered in the absence of knowledge of precisely what, if anything, is lacking in the home toward which compensation should be made. (pp. 174-175)

The most frequent recommendation found in the literature urges educators to incorporate the history, heritage, traditions, and lifestyles of diverse cultural groups when developing or adapting instructional materials or curricula. However, when emphasis is given to traditional aspects of culture, instructional materials may inadvertantly reinforce the very stereotypes and misperceptions educators wish to eliminate. Educators must learn as much as possible about the contemporary culture of students and create learning environments and curricula which are compatible with student characteristics, with expectations and desires of parents and community, and which are consistent with public policy. Cultural relevance, coupled with sound special education techniques, can provide a basic foundation for meeting the needs of exceptional minorities (Chinn, 1979b).

Henderson (1980) provides an overview of basic concepts related to cultural diversity and stereotypes associated with cultural and social variables and their influence on student performance. He concludes that the only variables consistently related to achievement are level of student involvement in academic tasks, the nature of teacher-pupil interactions, and internal perceptions of control.

Student Involvement

Recently, researchers have begun to address teacher behavior and pupil learning styles and their correlation with achievement of bilingual students. Preliminary findings of the Significant Bilingual Instruction Features study (Tikunoff, 1982) indicate that teaching behaviors of bilingual education teachers compared favorably with literature on effective instruction and particularly with studies which indicate that students make the most significant learning gains when they receive a great deal of instruction from, and interaction with, the teacher. The SBIF study showed that during effective bilingual instruction, teachers communicated clearly and engaged students in task completion; organized instructional activities which created, reinforced, and communicated task and instruction demands; monitored students' work; and provided frequent and immediate feedback. Teachers also mediated instruction using both English and the native language and responded to and used cultural clues. Under these conditions, LEP students were successful in understanding new information and task expectations and in obtaining accurate feedback regarding their performance. Evidence of this achievement was high academic learning time, time spent in a particular content area engaged in learning tasks with a high degree of accuracy. The SBIF findings are consistent with literature that suggests that when pupils have opportunities to express their ideas, and when their ideas are incorporated into learning activities, pupils seem to learn more and to develop more positive attitudes toward the teacher and learning (Silvernail, 1979).

Internal Perceptions of Control

The concept of locus of control, originally formulated by Rotter (1966), describes a person's perceptions of the relationship between actions and outcomes. "Internals" believe they are in control of their lives and that work and effort will result in reward. "Externals" believe outcomes are determined by luck, chance, fate, or powerful others who control their destinies in random fashion. Locus of control appears to be partially a function of socioeconomic status, as frequently poor or economically disadvantaged individuals are likely to demonstrate characteristics of externals (Henderson, 1980; Ortiz & Yates, 1982; Vasquez, 1975).

An external orientation may have devastating effects upon achievement of minority children. For example, some externals will have difficulty processing information and profiting from instruction presented from a framework of independence and intrinsic motivation. Additionally, externals are unlikely to analyze feedback accurately to determine how to change their behavior to become more successful within the school system

(Ortiz & Yates, 1984). Instead, external children begin to perceive themselves as helpless and unable to control what happens to them, and to see aversive situations as insurmountable. They fail to perceive their own effort as an important cause of success or failure. This sets into play teacher perceptions and expectations which maintain the cycle of failure and reinforce the learned helplessness (Henderson, 1980).

There is a striking parallel between the characteristics of children with external locus of control orientations and those attributes associated with learning disabled students. Consequently, guidance is needed to determine when children are experiencing school-related difficulties because of lack of compatibility between teaching and learning styles or when such difficulties would best be attributed to a handicapping condition.

Teacher-Pupil Interactions

Teacher expectations are the inferences or predictions teachers make about the present and future academic achievement and general classroom behavior of their pupils. When teachers hold positive perceptions and expectations, they provide increased quality of educational opportunity (Good & Brophy, 1973). Individuals labeled underachievers may become victims of lowered expectations for achievement and these expectations may negatively affect instructional opportunities (Rist, 1970).

Conversely, as the quality of instruction is diminished, over time, the quality of instruction alone could explain differences in achievement levels of children. Such a conclusion is significant given evidence which indicates that minorities lag far behind their peers in academic achievement (Brown, Rosen, Hill, & Olivas, 1980). Research associated with teacher-pupil interaction patterns and teaching styles and behaviors has not routinely included handicapped students, much less the handicapped LEP child. The majority of studies of exceptional individuals focus on the effects of handicapping condition on teacher perceptions, expectations, and interactions. Research has yet to determine the effects of differential interaction and teaching style patterns on the achievement of LEP populations or the interaction effects of linguistic/cultural diversity and handicapping conditions.

PROMISING PRACTICES

Useful Models

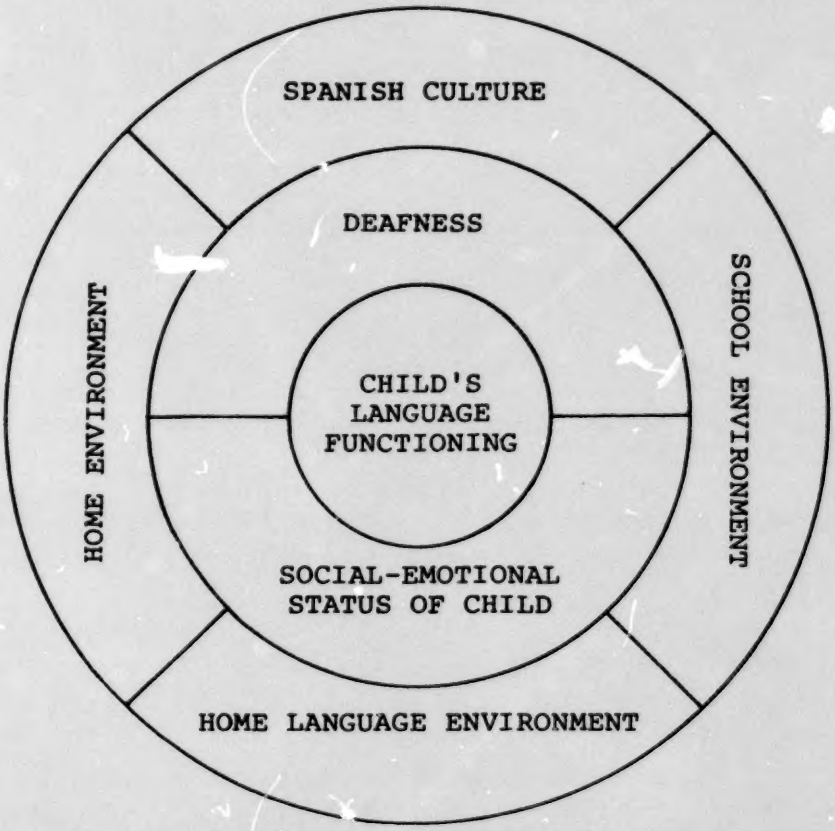
Adelman (cited in Hammill & Bartel, 1971) suggests a two-step process for educating students experiencing achievement problems. The first step is to personalize the instructional environment so compatibility between student charcteristics and teaching/learning styles is attained. The second step requires that instruction be carefully sequenced in such a way that the student is ready to learn the content or concepts presented.

Using models such as Adelman's provides assurance that the environment has been personalized, making it more likely that children

will not be inappropriately referred to special education on the basis of learning problems which could best be attributed to failure to accommodate individual differences. Sequencing instruction and the use of significantly different instructional strategies provide a number of opportunities to improve student performance before a referral to special education is made. Once a referral is made, documentation of prior interventions provides valuable data, not only for assessment purposes, but also for development of an individual education plan if the child is eligible for special education.

Lerman and Cortez (1978) provide a comprehensive model, illustrated in Figure 1, for discovering and meeting the needs of handicapped children from dual language backgrounds. While this model was developed for the hearing impaired, variables considered are generally applicable to all categories of handicapping condition and provide an excellent framework for personalizing instruction.

FIGURE 1
Variables Affecting Language Functioning



Note. From A. Lerman and E. Cortez. (1978). Discovering and meeting the needs of Hispanic hearing impaired children. ERIC Document Reproduction Service No. ED 155-292.

Areas included in the model include the following:

I. Language status of the child

   A. Language used by the child

   B. Child's mode of communication in language(s) used

   C. Competence in language(s) and modes

II. Social-emotional station of the child (e.g., social interaction, success, school adjustment)

III. Culture

   A. Background and family (e.g., identification with national origin, status in country of origin)

   B. Factors affecting parents' functioning with the child (e.g., roles, discipline)

IV. Home language environment

   A. Patterns of communication in the family (e.g., competence, language used with child, amount of communication, attitudes toward learning English)

   B. Avenues of communication in the home

   C. Patterns of residence (e.g., travel between U. S. and native country)

   D. Language of materials in the home

V. Home environment

   A. Description of family members (e.g., general characteristics, major caregivers, parent's education, place of birth or childhood)

   B. Patterns of residence

   C. Economic factors

   D. Neighborhood

   E. The family and institutions (e.g., contacts, use)

VI. School environment

   A. Patterns of school enrollment (e.g., number of years in school, where, attendance)

B. School's accommodation of bilingual or LEP children and families (e.g., percentage in the school, number of bilingual personnel, school language programs)

C. Teacher's relationship with the child

VII. Handicapping condition

A. General consideration (e.g., etiology, age of onset)

B. Role of parents (e.g., initial reactions, present attitudes)

The components of the model become the critical data for effective IEP development.

Instruction Strategies

Ambert and Dew (1982) suggest that IEPs for bilingual children include a language use plan designating what subjects or skills will be taught in which language, and specifying the language of instruction for each objective in the plan. Recommendations for instructional strategies, techniques, and materials which are linguistically relevant and appropriate to the handicapping condition must be identified; appropriate reinforcers and motivators should be specified. The following strategies and approaches appear to have potential for improving practice in instruction of handicapped bilingual students.

Second Language Acquisition. Children acquire as opposed to learn, a second language by understanding messages, not by focusing on linguistic form or analyzing structures as is frequently done in language teaching (Krashen, 1982). Contrary to popular belief, increased exposure to English does not improve or hasten second language acquisition. Consequently, submersion or "sink-or-swim" programs in which children are simply placed in the same classroom with native English speakers and the regular curriculum is followed will not be successful. Adding English as a Second Language instruction to the submersion program will help but the most effective program is one in which subject matter is taught in the native language and a source of comprehensible English input is provided.

Based on their studies of second language acquisition, Dulay, Burt, and Krashen (1982) provide the following guidelines for teaching English as a second language:

1. Maximize the student's exposure to natural communication.

2. Focus on the message being conveyed, not the linguistic form of the message.

3. Incorporate a silent period at the beginning of the instructional program so that students will be able to listen to the second language without being pressured to speak it.

4. Encourage and create situations in which students can interact with native speakers of the language.

5. Use concrete referents to make the new language understandable to beginning students.

6. Devise specific techniques to relax students and to protect their egos. The less anxious, more motivated, more self-confident students experience greater success in second language acquisition (Krashen, 1982).

7. Learn the motivations of students and incorporate these into lessons.

8. Create an atmosphere where students are not embarrassed by their errors.

9. Do not refer to, or revert to, the student's native language when teaching the second language. To do so may create a situation in which the student, instead of focusing attention on the second language, simply waits for the teacher to repeat utterances in the native language. Under these circumstances, motivation for second language learning may be negatively affected.

Language acquisition takes place best when input is provided that is (a) comprehensible; (b) interesting and relevant; (c) not grammatically sequenced; and (e) provided in sufficent quantity (Krashen, 1982). Krashen uses these criteria to evaluate methods for language teaching. Traditional methods such as audio-lingual, grammar-translation, and cognitive code methods do not do an effective job of encouraging subconscious language acquisition. The following methods provide comprehensive input and thus facilitate language acquisition (National Clearinghouse for Bilingual Education, 1984):

1. The Total Physical Response approach (Asher, 1979) develops language comprehension through student's body movements. Commands are given in the second language and acted out first by teachers and then by students, allowing students to perceive the meaning of the commands while hearing the language.

2. Suggestopedia (Bushman & Madsen, 1976), a method developed by Georgi Lozanov, uses nonverbal techniques, classical music, and aesthetic surroundings to provide a comfortable ambience for language learning.

3. The natural approach (Krashen & Terrell, 1983) encourages language acquisition by developing proficiency without direct or conscious recourse to the formal rules of the language and focuses on successful expression of meaning rather than on correctness of form.

These methods seem to be more effective than traditional approaches because they provide time for students to develop comprehension skills, attempt to reduce student anxiety, and provide a source of comprehensible

input. For handicapped students, these methods offer simplified language codes and active involvement in the learning process, sound special education teaching principles.

Instrumental Enrichment. Harth (1982) suggests that traditional special education interventions, because they are based on the assumption that low functioning individuals are not modifiable, are designed to prepare individuals to function at low levels. These programs "mold the requirements and activities of the educational setting to fit the student's level of functioning. Thus the student's educational program prepares him or her to function in a marginal, perhaps semi-dependent environment" (p. 1).

Feuerstein (1980) reasons that retarded performance of children may be the result of lack of mediated learning experiences (MLE), rather than lack of interaction with the environment. Too few mediated experiences can result in poor thinking skills which, in turn, reduce the individual's ability to learn from further direct experiences. Neither remedial efforts aimed at providing a stimulating environment nor emphasis on traditional academics will be effective in overcoming cognitive deficiencies. Instead, there is the need to mediate learning experiences, that is, to intervene between the person and the environment and to transform, reorder, organize, group, and frame the stimuli in the direction of some specifically intended goal and purpose.

Feuerstein's (1980) Instrumental Enrichment (FIE) program is designed to mediate experiences by making the individual more receptive and sensitive to internal and external sources of stimulation. This approach is directed, not only at remediation of specific behaviors and skills, but also at changing the person's manner of interacting with, acting on, or responding to sources of information. Tasks are structured in such a way that they require the student to: (a) use higher mental processes; (b) develop intrinsic motivation through formation of habits; and (c) contribute actively to the organization, restructuring, discovery, and application of produced relationships. In essence, what the student is doing is learning to learn.

Feuerstein identifies "flaws" in basic thinking skills among slow learners including: (a) impulsivity; (b) failure to recognize problems; (c) episodic grasps of reality -- that is, events and objects are viewed in isolation; (d) failure to make comparisons; and (e) inadequate spatial orientation (Chance, 1981). Retarded performers fail to recognize that their own intellectual efforts may contribute to solution of the problem and, instead, see themselves simply as recipients of information. There is a striking similarity between these "flaws" and characteristics attributed to children with an external locus of control.

The literature suggests that minority group children and children from lower socioeconomic status environments are likely to be externals. The literature is also replete with reports that externals are likely to be underachievers. Henderson (1980) suggests that teachers provide

external students with opportunities to set goals and to help determine their own activities. Cognitively oriented attribution retraining and environmental control and self-regulation programs can be used to teach cause-effect relationships. If it is indeed possible to train thinking skills, the academic performance of minority students could be significantly improved through the use of the FIE. Findings of several studies conducted in this country show positive effects for the use of the FIE; students who have had this training show a slight advantage over control groups on varied measures of intelligence and these gains seem to hold over time. Chance (1981) cautions, however, that there is not a sufficient body of carefully controlled research available demonstrating that students do indeed benefit from instrumental enrichment. The use of the FIE is a promising area for research related to best practices in intervention for minority students, including exceptional language minorities.

Educational Implications of Hemispheric Research. Studies of cerebral organization for language suggest that language is organized in the brain of bilingual individuals in a manner that is different from that of monolinguals. Research with monolingual subjects has indicated that the left hemisphere is dominant for language in most individuals; studies of bilinguals suggest that the right hemisphere plays a major role in the learning of a second language (Albert & Obler, 1978). It is possible that early emphasis on one hemisphere can lead to permanent cognitive deficits.

Rubenzer (1979) suggests that, instead of focusing on improving curricula, emphasis should be given to increasing students' receptivity (meta-skills) to learning experiences and materials. In the classroom, balanced approaches to teaching should be used, teaching toward both the left and the right hemispheres. While the brain is "bifunctional," the most productive and creative intellectual functioning is theorized to occur when there is cooperation between hemispheres. Educational experiences specifically designed to enhance right brain processing also improve performance on left hemisphere tasks. Shifts in the quality and focus of attention can be consciously elicited and the most advantageous cognitive and effective modes can be consciously attained apropos the stage of problem solving at hand. Patterns found to best facilitate problem solving can then be practiced.

Materials and Media. Results of a questionnaire by Bland, Sabatino, Sedlack, and Sterberg (1979) indicate a general agreement among respondents that learner characteristics of minority and handicapped children require specially developed curricula and alternative modes of presentation. However, even when available, media and materials developed specifically for these children must be adapted because they are not suitable; i.e., they lack relevance to the student's background, fail to accommodate linguistic characteristics, and/or reflect cultural bias. This is particularly true of academic subjects requiring reading, language development, prevocational skills, and affective social instruction.

Teachers have little recourse other than to improvise or to adapt materials developed for handicapped or for bilingual students. Criteria for evaluation of materials must include a description of their characteristics; cultural relevance; effect of adaptation on content, intent, or objectives of materials; and differences associated with student learning styles (DeLeon, 1983). DeLeon also suggests viewing the classroom as an ecological system so that materials evaluation would include analysis of the curriculum, the student, the teacher, and the physical environment in which the student must perform.

Service Delivery Models

Handicapped children should have access to the same types of placement options as are provided handicapped monolingual English speakers. This right is frequently ignored when placement decisions are made for LEP students because of the common misconception that, if they are handicapped, these students should be removed from a bilingual instructional setting and placed in a totally English language curriculum. As has been discussed, such reasoning ignores that native language proficiency will determine level of success in acquiring English skills (Cummins, 1981). Placement in special language programs should be continued, if appropriate, and teachers should be provided assistance in adapting classroom programs to meet the child's special education needs.

A major problem in determining appropriate educational placements for handicapped bilingual students is the shortage of special education personnel who are bilingual and who have specialized training related to serving exceptional limited-English-proficient or bilingual students. The majority of LEP or bilingual students are served by native English speakers who use the same instructional strategies and procedures as are used with monolingual English speaking students. Consequently, educational prescriptions often fail to yield desired results as they do not accommodate student differences across variables such as language and culture.

School districts have begun to explore alternative service delivery models for bilingual students. Figure 2 illustrates three models which allow the integration of specialized curriculum in the first or second language and mainstreaming to either a bilingual education or a regular education program (Ambert & Dew, 1982).

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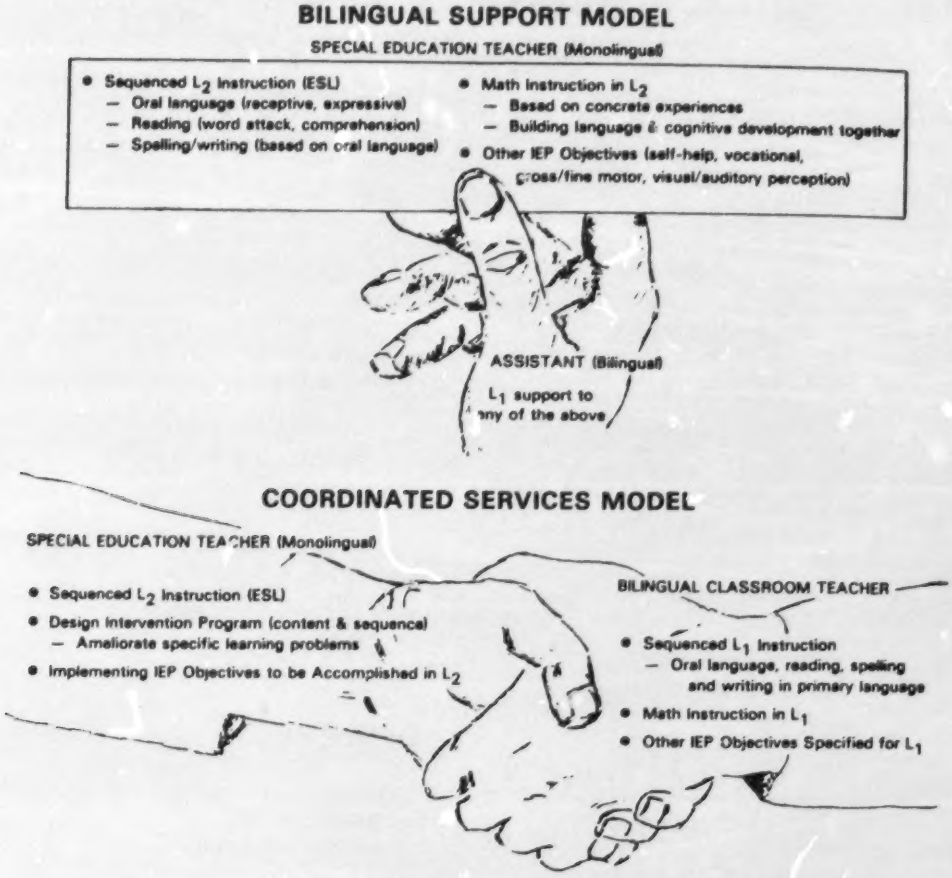
FIGURE 2
Service Delivery Options for Exceptional Bilingual Students


BILINGUAL SUPPORT MODEL
SPECIAL EDUCATION TEACHER (Monolingual)
• Sequenced L_2 Instruction (ESL)
— Oral language (receptive, expressive)
— Reading (word attack, comprehension)
— Spelling/writing (based on oral language)
• Math Instruction in L_2
— Based on concrete experiences
— Building language & cognitive development together
• Other IEP Objectives (self-help, vocational, gross/fine motor, visual/auditory perception)
ASSISTANT (Bilingual)
L_1 support to any of the above
COORDINATED SERVICES MODEL
SPECIAL EDUCATION TEACHER (Monolingual)
• Sequenced L_2 Instruction (ESL)
• Design Intervention Program (content & sequence)
— Ameliorate specific learning problems
• Implementing IEP Objectives to be Accomplished in L_2
BILINGUAL CLASSROOM TEACHER
• Sequenced L_1 Instruction
— Oral language, reading, spelling and writing in primary language
• Math Instruction in L_1
• Other IEP Objectives Specified for L_1
INTEGRATED BILINGUAL SPECIAL EDUCATION MODEL
BILINGUAL SPECIAL EDUCATION TEACHER
• Comprehensive Language Development Program
L_1 Oral Language, Reading, Spelling/Writing
L_2 Oral Language, Reading, Spelling/Writing
• Math Instruction (L_1 L_2)
• Other IEP Objectives (L_1 L_2)
Nancy Dew, Illinois Resource Center, 1982.
Graphics by Ruth Ellen Finn.

Note. From A. Ambert and N. Dew, Special education for exceptional bilingual students: A handbook for educators (Milwaukee WI: Midwest National Origin Desegregation Assistance Center, 1982), p. 85.

Bilingual Support Model. Bilingual paraprofessionals are teamed with monolingual English-speaking special educators and assist with the implementation of objectives specified in the IEP. The special education teacher provides English as a Second Language instruction in basic skills areas in English. Caution is exercised to ensure that the linguistic requirements of academic tasks are consistent with the child's English language development. Instruction in subjects such as math are based on concrete experiences and build language and cognitive development together. The teacher assistant provides native language instruction in areas specified in the IEP as requiring native language instruction.

The bilingual support model has the obvious advantage that the child has access to someone who speaks his or her language. If bilingual paraprofessionals received training specific to the responsibilities and tasks they are asked to perform, they become invaluable resources for the monolingual teacher. Without access to such personnel, children may essentially be denied appropriate educational opportunities.

Coordinated Services Model. Under this model, handicapped LEP students are served by a team consisting of a monolingual English speaking special education teacher and a bilingual educator. The special educator provides ESL instruction and is responsible for implementing IEP objectives to be accomplished in English. The bilingual education teacher provides sequenced instruction in the basic skills areas (oral language, math, reading, spelling, writing, etc.) in the native language and is reponsible for services designated in the IEP which are to be provided in the native language.

The benefit of this model is that handicapped children have access to personnel trained in the complementary disciplines of bilingual education and special education. These teachers meet to review student progress and revise instructional programs accordingly. Another advantage is that bilingual educators may be able to facilitate parental involvement in decisions affecting their child's education.

The coordinated services model may not be cost-effective. Two teachers are required to serve handicapped LEP students in special education classrooms. Unless a district has large numbers of children requiring special education services in a language other than English, this model is not likely to be used.

Integrated Bilingual Special Education Model. This model is used when a district has teachers who are trained in both bilingual education and special education. These dually certified teachers provide special education instruction in the native language, provide English as a second language training, and assist in the transition into English language instruction as the child develops adequate proficiency. Instruction is adapted to meet the specific needs associated with the nature and severity of the handicapping condition. This model, while it may be cost-effective, is seldom used because of the scarcity of teachers with training in both fields.

Bilingual Special Education Model. Ortiz and Yates (1982) suggest a fourth model based on the premise that teachers who serve handicapped LEP students require more than training in bilingual education and special education. Rather, there is a unique body of knowledge supportive of, and unique to, bilingual special education. To illustrate this concept, a teacher who is knowledgeable about programming for mentally retarded students, and who has been trained in bilingual education, many not be able to bring together these knowledge bases to develop an appropriate educational program for the mentally retarded LEP student. Bilingual special education teachers are those who have been exposed to and have developed competencies specific to servicing exceptional bilingual students. There are few such personnel available because there are few bilingual special education training programs and because there is little research available specific to LEP handicapped children. Many of the unique aspects of bilingual special education are yet to be identified.

All four models require, at some point, interdisciplinary teams for service delivery. Members of the team contribute their unique expertise, experience, and training, facilitating an interface among bilingual education, special education, regular education, and related programs. Educators participating in coordinated efforts must be provided opportunities to develop increased awareness and skills to ensure that LEP children are afforded appropriate educational programs and services. Categories of instructional personnel who should be targeted for training include the following (Ortiz & Yates, 1982):

Bilingual education teachers. These teachers are serving (a) children who are handicapped but who have not been referred because of the lack of bilingual special education teachers or because bilingual educators lack skills to identify children who should be referred to special education and (b) children who are handicapped and who have been mainstreamed into their classes. Bilingual educators frequently lack training to help exceptional children achieve their potential in the context of the regular classroom.

Special education teachers who are bilingual. One should not assume that if a teacher is bilingual and has special education training, he or she can serve exceptional LEP children effectively. These individuals should not necessarily be considered bilingual/special education teachers, but only special education teachers who are bilingual. This is a critical distinction and only those teachers who have received training in both bilingual and special education should be considered bilingual/special education teachers. Training in areas such as how to provide native language instruction and how to adapt such instruction to meet children's special education needs can increase the effectiveness of services provided by these teachers.

Monolingual special education teachers. As indicated previously, the reality is that the majority of exceptional bilingual children are served by monolingual English speaking special education personnel. Effectiveness of services is increased when teachers are provided

training relative to factors which influence the performance of LEP students and on how to provide instruction in English which is comprehensible and relevant given the language, culture, and other attributes of this population. Training in English as a Second Language techniques and methods is important for these personnel.

Regular classroom teachers. Overrepresentation of LEP students in language-related categories (Garcia, 1983; Maldonado, 1984; Ortiz & Yates, 1983) suggests that teachers are unable to distinguish linguistic/cultural differences from handicapping conditions. Training of regular educators may result in more appropriate referrals to special education and in the provision of more appropriate education programs in mainstream settings. Of particular concern is that regular classroom teachers continue to provide language support for students who are exited from special language programs to ensure they have adequate English proficiency to perform academic tasks successfully (Cummins, 1981; Ortiz, 1984).

Paraprofessionals. There is a need to train paraprofessionals who, in many instances, will have primary responsibility for instructing the handicapped LEP child. Unless these personnel receive training specific to the responsibilities and tasks they are required to perform, handicapped LEP children may essentially be denied educational opportunities. Content for training of paraprofessionals would include competencies associated with general education procedures, competencies to provide native language instruction and English as a second language instruction, and skills to adapt instruction to the needs of the handicapped learner.

Assessment personnel. There is a scarcity of assessment personnel who can test the child in his or her native language and interpret performance in light of the student's background characteristics. Consequently, children may be inaccurately diagnosed as handicapped because appraisal services appropriate both in terms of the handicapping condition and specific student characteristics are not available.

Administrators. As indicated earlier, coordination between bilingual education and special language programs is critical to serving bilingual exceptional students. This coordination would not, for many schools, require reorganization of programs and services, but rather establishment of mechanisms for ensuring coordination of effort. It is the responsibility of administrators, particularly principals and supervisors, to ensure that necessary services are provided, adequate resources are allocated, and instructional interventions recommended are implemented (Ortiz & Yates, 1982). Assisting and/or training administrators in program management strategies would be beneficial in achieving bilingual education-special education interfaces.

Other support personnel. Personnel in related services areas such as counseling, physical and occupational therapy, adaptive physical education, etc. should also be provided training in order to allow their

actions and decisions related to LEP handicapped students to be rational, data based, and appropriate. Parents need assurance that they can be effective and informed participants in decision making processes related to their children's education. To develop such effectiveness, they need training related to the school milieu, school policies, and procedures, instructional options, and so forth.

SUMMARY

The literature does not directly address the need for new curricula and instructional methods for bilingual exceptional students. This may be due to the paucity of empirical research on this topic. It would be premature to conclude that existing curricula and materials can meet the needs of this population. Until such research is available, research conducted in related disciplines will continue to provide the basis for educational programming decisions. As new research findings are produced and disseminated, practices should be modified or adapted as appropriate.

Already in place is evidence that bilingual education and special education can be linked together in effective problem solving formats. It is possible to describe instructional arrangements being used for bilingual exceptional students, but there is little empirical evidence available to determine the most appropriate arrangement(s) for any given handicapping condition or identified student characteristics.

A major issue is whether handicapped students should receive dual language instruction. Educators wonder whether it may be more effective, when an LEP student is eligible for special education, to remove that student from a bilingual education placement and place him or her in a classroom where instruction is provided solely in English. Literature on second language acquisition would not support this decision. There is growing evidence that handicapped children, just like normal children, receive the most appropriate education when they are provided instruction in their native language, participate in a structured program fr learning English if appropriate, and when instruction is consonant with both the handicapping conditions and student background characteristics.

There is a need to develop instructional materials and curricula and to make them available to educators who serve exceptional LEP students. This is not an awesome task in that much groundwork has already been done in identifying existing materials which may be appropriate to this population or which could be adapted to meet specific student needs or characteristics (Dew, 1981; Deignan & Ryen, 1979). It would not be accurate, then, to say that there are no materials on the market. However, information about resources which do exist has not been disseminated widely.

It is questionable whether it is possible to leave responsibility for adapting or modifying curricula or materials to existing school personnel. There is a general lack of understanding of linguistically and culturally different populations, even in settings where minorities

comprise the majority student body (Maldonado, 1984; Garcia, 1984). Because of the lack of data readily available, teachers and others would not be able, on an ongoing basis, to adapt instructional materials and strategies to make them relevant in terms of LEP student characteristics and instructional goals. Appropriately trained staff could address this issue. However, as indicated previously, few institutions of higher education or related agencies currently address the needs of bilingual special education populations in the context of teacher preparation programs. Institutions which provide preservice bilingual special education training programs do not have the capability to meet manpower needs for bilingual special educators. Further, it is unlikely that adequate resources would be allocated to provide the required in-depth inservice training to currently employed personnel.

What emerges is a critical need for networking of efforts. State education agencies, local school districts, institutions of higher education, regional or intermediate agencies, must all become sensitized to the issues or concerns, allowing a broad-based inclusion of training, policy formulation, and procedures which focus upon the needs of LEP handicapped students. Without such a focus, an increasing percentage of this country's most critical resources, its youth, will remain unavailable to the required futures of the nation.

REFERENCES

Albert, H., & Obler, L. (1978). The bilingual brain: Neuropsychological and neurolinguistic aspects of bilingualism. New York: Academic Press.

Almanza, H., & Mosley, W. (1980). Curriculum adaptations and modifications for culturally diverse handicapped children. Exceptional Children. 46, 608-614.

Ambert, A., & Dew, N. (1982). Special education for exceptional bilingual students: A handbook for educators. Milwaukee: Midwest National Origin Desegregation Assistance Center.

Asher, J. (1979). Learning another language through actions: The complete teacher's guidebook. Los Gatos CA: Skyoak Productions.

Askins, B. (1978). Responsive Environment Early Education Program (REEEP). Third-year evaluation study: Final evaluation report, 1977-1978. Santa Fe: New Mexico State Department of Education.

Baca, L. (1980). Policy options for insuring the delivery of an appropriate education to handicapped children who are of limited English proficiency. Reston VA: The Council for Exceptional Children.

Baca, M. (1974). What's going on in the bilingual special education classroom? TEACHING Exceptional Children, 7, 25.

Benson, C. S., Medrich, E. A., & Buckley, S. (1980). A new view of school efficiency: Household time contributions to school achievement. In J. W. Guthrie (Ed.), School finance policies and practices. The 1980s: A decade of conflict (pp. 169-204). Cambridge MA: Ballinger Publishing Company.

Bland, E., Sabatino, D., Sedlack, R., & Sterberg, L. (1979). Availability, usability, and desirability of instructional materials and media for minority handicapped students. The Journal of Special Education, 13, 157-167.

Brown, G., Rose, N., Hill, S., & Olivas, M. (1980). The condition of education for Hispanic Americans. Washington, DC: National Center for Education Statistics.

Bruck, M. (1978). The suitability of early French immersion programs for the language disabled child. The Canadian Modern Language Review, 34, 884-887.

Bryen, D. (1974). Special education and the linguistically different child. Exceptional Children, 40, 589-599.

Bushman R., & Madsen, H. (1976). A description and evaluation of Suggestopedia--A new teaching methodology. In J. Fanselow & R. Crymes (Eds.), On TESOL '76 (pp. 29-38). Washington DC: TESOL.

Chan, K., & Rueda, R. (1979). Poverty and culture in education: Separate but equal. Exceptional Children, 45, 422-428.

Chance, P. (1981). The remedial thinker. Psychology Today. 16, 63-73.

Chinn, P. (1979a). Curriculum development for culturally different exceptional children. Teacher Education and Special Education, 2(4), 49-58.

Chinn, P. (1979b). The exceptional minority child: Issues and some answers. Exceptional Children, 45, 532-536.

Cummins, J. (1981). Four misconceptions about language proficiency in bilingual education. Journal of the National Association for Bilingual Education, 5(3), 31-45.

Cummins, J. (1982). The role of primary language development in promoting educational success for language minority students. In Schooling and language minority students: A theoretical framework. Los Angeles: Bilingual Education Evaluation, Dissemination, and Assessment Center.

Cummins, J. (1983). Bilingualism and special education: Program and pedagogical issues. Learning Disabilities Quarterly, 6, 373-386.

Deignan, M., & Ryen, K. (1979). Annotated bibliography of bilingual teaching materials applicable to the special learning needs of Spanish-dominant special education pupils. Portsmouth NH: New England Teacher Corps Network.

DeLeon, J. (1983). Evaluating and adapting materials for use with bilingual exceptional children. Paper presented at the meeting of The Council for Exceptional Children, Detroit, Michigan.

Dew, N. (1981). Specialized curriculum materials for exceptional bilingual children. Arlington Heights IL: Illinois Resource Center for Exceptional Bilingual Children.

Dew N. (1983). Components of a quality intervention program for LEP exceptional students. Unpublished training material. (Available from Illinois Resource Center for Bilingual Exceptional Children, Arlington Heights, Illinois).

Diggs, R. (1974). Education across cultures. Exceptional Children, 40, 578-583.

Dulay, H., Burt, M., & Krashen, S. (1982). Language two. New York: Oxford Unversity Press.

Feuerstein, R. (1980). Instrumental enrichment: An intervention program for cognitive modifiability. Baltimore: University Park Press.

Garcia, S. (1983). Effects of student characteristics, school programs and organization of decision making for placement of Hispanic students in classes for the learning disabled. Doctoral dissertation, in preparation, The University of Texas at Austin.

Garcia, S. (1984). Effects of student characteristics, school programs, and organization on decisionmaking for the placement of Hispanic students in classes for the learning disabled. Unpublished doctoral dissertation, The University of Texas at Austin, Austin.

Good, T., & Brophy, J. (1973). Looking in classrooms. New York: Harper & Row.

Greenlee, M. (1981). Specifying the needs of a 'bilingual' developmentally disabled population: Issues and case studies. The Journal of the National Association for Bilingual Education, 6(1), 55-76.

Hammill, D., & Bartel, N. (Eds.). (1971). Educational perspectives in learning disabilities. New York: John Wiley & Sons.

Harth, R. (1982). The Feuerstein perspective on the modification of cognitive performance. Focus on Exceptional Children, 15,(3), 1-12.

Henderson, R. (1980). Social and emotional needs of culturally diverse children. Exceptional Children, 46, 598-605.

Jaramillo, M. (1974). Cultural conflict curriculum and the exceptional child. Exceptional Children, 40, 585-587.

Johnson, T., & Krug, K. (1980). Integrative and instrumental motivations in search of a measure. In J. Oller & K. Perkins (Eds.), Research in language testing. Rowley MA: Newbury House.

Krashen, S. (1982). Bilingual education and second language acquisition theory. In Schooling and language minority students: A theoretical framework. Los Angeles: Bilingual Education Evaluation, Dissemination, and Assessment Center.

Krashen, S., & Terrell, T. (1983). The natural approach: Language acquisition in the classroom. Oxford England: Pergamon Press.

Lerman, R., & Cortez, E. (1978). Discovering and meeting the needs of Hispanic hearing impaired children. (ERIC Document Reproduction Service No. ED 155-292)

Maldonado, E. (1984). A comparison of assessment, placement, and services provided Hispanics and non-Hispanics in speech, hearing, and language programs. Unpublished doctoral dissertation, University of Massachusetts, Amherst.

McConnell, B. (1981). IBI (Individualized Bilingual Instruction): A validated program model effective with bilingual handicapped children. Paper presented at The Council for Exceptional Children Conference on the Exceptional Bilingual Child, New Orleans, LA.

Muller, M. (1975). Itinerant bilingual services program for Title I eligible CRMD children. Brooklyn: New York City Board of Education, Office of Educational Evaluation.

National Clearinghouse for Bilingual Education (NCBE). (1984, June 6). Second language teaching. Memo, p. 1-4.

Ortiz, A. (1981). Development and implementation of IEPs for exceptional bilingual children. In J. Nazzaro (Ed.), Culturally diverse exceptional children in school. Reston VA: The Council for Exceptional Children.

Ortiz, A. (1984). Choosing the language of instruction for exceptional bilingual children. TEACHING Exceptional Children, 16, 208-212.

Ortiz, A., & Yates, J. (1982). Teacher training associated with serving bilingual exceptional students. Teacher Education and Special Education, 5(3), 61-68.

Ortiz, A., & Yates, J. (1984). Staffing and the development of individualized education programs for bilingual exceptional students. In L. M. Baca & H. T. Cervantes (Eds.), The bilingual special education interface (pp. 187-212). St. Louis: Times Mirror/Mosby College Publishing.

Plata, M. (1979). Preparing teachers for the Mexican American handicapped: The challenge and the charge. Teacher Education and Special Education, 2(4), 21-26.

Rist, R. (1970). Student social class and teacher expectations: The self-fulfilling prophecy in ghetto education. Harvard Educational Review, 40, 411-450.

Rodriguez, R., Cole, J., Stile, S., & Gallegos, R. (1979). Bilingualism and bilculturalism for the special education classroom. Teacher Education and Special Education, 2(4), 69-74.

Rotter, J. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 80(1), 1-28.

Rubenzer, R. (1979). The role of the right hemisphere in learning and creativity: Implications for enhancing problem solving ability. The Gifted Child Quarterly, 23(1), 78-100.

Senua, U. (1976). Bilingual programs for the physically handicapped, school year 1974-1975. Brooklyn: New York City Board of Education.

Secada, W. (in press). The language of instruction for hearing impaired students from non-English speaking homes. In C. Delgado (Ed.), The Hispanic deaf -- Issues and Challenges. Washington DC: Gallaudet College Press.

Silvernail, D. (1979). Teaching styles as related to student achievement. Washington DC: National Education Association.

Tikunoff, W. (1982). The significant bilingual instructional features descriptive study: Progress and issues from Part I. Paper presented at the meeting of the American Educational Research Association, New York.

Vasquez, J. (1975). Locus of control, social class and learning. In School desegregation and cultural pluralism: Perspectives on progress. San Francisco: Service, Training, and Research in Desegregated Education, Far West Laboratory for Educational Research & Development.

Weiss, R. (1980). Efficacy and cost effectiveness of an early intervention program for young handicapped children. Paper presented at the meeting of the Handicapped Children's Early Education Program (HCEEP) Project Directors, Washington, D.C.